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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,751

11/14/2005

Thorsten Pferdekaemper

07781.0221-00

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22852

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06/04/2008

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EXAMINER

SHECHTMAN, CHERYL MARIA

ART UNIT

PAPER NUMBER

2163

MAIL DATE

DELIVERY MODE

06/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,751	Applicant(s) PFERDEKAEMPER ET AL.	
	Examiner CHERYL M. SHECHTMAN	Art Unit 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/7/05, 7/13/06, 6/19/07, 3/25/08, 5/14/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to Preliminary Amendment filed March 7, 2005. Claims 1-12 and 14-21 are pending. Claims 1-12 are amended. Claim 13 is cancelled. Claims 14-21 are newly added.

Information Disclosure Statement

2. The information disclosure statement filed on 3/7/2005 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the cited Non Patent Literature document 'Datenarchivierung mit SAP' is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP§ 609 C(1). Applicants are requested to submit an English translation copy of 'Datenarchivierung mit SAP'.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-12 and 14-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claims 1, 11 and 12, the claims recite the limitation "the lock object is accessible by a software application". However, it is unclear as to which of the first or second lock objects this limitation references.

Claims 2-10, and 14-21 depending from claims 1, 11, and 12 therefore inherit the aforementioned deficiencies and are hereby rejected.

Due to the 35 USC § 112 rejections, the claims have been treated on their merits as best understood by the examiner.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-10, 12 and 14-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Referring to claim 1, the claim discloses "a data structure for preventing access, in a computer system, to a data object..". However data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and

functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Referring to claim 12, the claim discloses "a computer readable medium comprising instructions for creating a data structure for preventing access..". However, this claim is not statutory because the claim does not require the instructions to be stored within the computer readable medium or executed therein. Examiner suggests that the claim read "A computer readable medium storing executable instructions which, when executed create a data structure for preventing access..".

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the

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applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 5-9, 11, 12, 14, 15 and 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Number 6,594,683 issued to Furlani et al (hereafter Furlani).

Referring to claim 1, Furlani discloses a data structure for preventing access, in a computer system, to a data object having an identifier (ID)(Abstract; Fig 3 and 5A), comprising:

- a first lock object ('Group lock object', Fig. 3, element 303), in which the ID of the data object is stored, and in which a link to a storage location of the data object is assigned to the ID ('LockObject ID' pointer, Fig. 3, element 325, col. 8, lines 15-25; col. 8, lines 35-50), and
- a second lock object ('Reference lock object', Fig. 3, element 301), in which the ID of the data object is stored ('MaxLockObject ID', Fig. 3, element 313; col. 8, lines 6-14), wherein
 - o the ID is stored in the second lock object before storing the ID in the first lock object or before assigning the storage location of the data object to the ID in first lock object (col. 8, lines 6-25), wherein
 - o the ID is deleted from the second lock object after storing the ID in the first lock object or after assigning the storage location of the data object to the ID

- in the first lock object (Fig. 3, element 319; col. 8, lines 30-34; see Unlock function in Fig. 5A), and wherein
- the lock object is accessible by a software application, whereby the access of the software application to the data object is prevented if the ID is stored in the first or second lock object (Abstract; col. 2, line 59 – col. 3, line 4).

Referring to claim 11, the limitations of the claim are similar to those of claim 1 above and therefore claim 11 is rejected for the same reasons addressed above. In addition, claim 11 is directed to a computer system with memory means having program instructions; input means for entering data; storage means for storing data; and a processor responsive to the program instructions (see Fig. 1 and related portions of specification).

Referring to claim 12, the limitations of the claim repeat the respective limitations of claim 1 above in the form of a computer readable medium comprising instructions (see Fig. 1 and related portions of specification).

Referring to claims 2 and 14, Furlani discloses that the link is a filename or a link to a file (Fig. 3; filestorage mechanism, col. 5, line 66 - col. 6, line 10).

Referring to claims 3 and 15, Furlani discloses that the first lock object is a file stored in a nonvolatile storage means ('Cd-ROM', Fig. 1, element 115; col. 5, line 66 – col. 6, line 10).

Referring to claims 5 and 17, Furlani discloses that the data object comprises one or more fields of one or more tables and wherein the ID comprises one or more key fields of the one or more tables (Fig. 3, element 307).

Referring to claims 6 and 18, Furlani discloses that the first and second lock objects are created by a data moving or data archiving process (col. 5, lines 1-8; see also claim 12 of Furlani).

Referring to claims 7 and 19, Furlani discloses that the second lock object is stored in a volatile or nonvolatile storage means ('Cd-ROM', Fig. 1, element 115; col. 5, line 66 – col. 6, line 10).

Referring to claims 8 and 20, Furlani discloses that the second lock object is a data array (see Fig. 3, element 301).

Referring to claims 9 and 21, Furlani discloses that the data array is one dimensional (see Fig. 3, element 301).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 and 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 6,594,683 issued to Furlani et al (hereafter Furlani), as applied to claims 1 and 11 above, and further in view of US Patent Number 5,566,319 issued to Lenz.

Referring to claims 4 and 16, Furlani discloses all of the above claimed subject matter, however remains silent as to:

- the first lock object comprising a table, having a column for the ID and a column for the link of the ID to a storage location.

However, Lenz teaches analogous art discloses analogous art that includes:

- a first lock object comprising a table, having a column for an ID and a column for the link of the ID to a storage location ('Lock File' 3-1, Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Furlani to include a first lock object comprising a table, having a column for an ID and a column for the link of the ID to a storage location, as taught by Lenz.

The ordinary skilled artisan would have been motivated to modify Furlani per the above for the purpose of enabling rapid verification of optimistic assumption for lock file control fields (Lenz, col. 2, lines 49-67).

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furlani, as applied to claim 1 above, and further in view of Applicant's admitted prior art (hereafter AAPA).

Referring to claim 10, Furlani discloses all of the above claimed subject matter, however remains silent as to using data structures in enterprise resource planning software.

However, AAPA teaches the use of data structures in enterprise resource planning software (ERP) applications (para. 4-5 of the instant specification).

It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Furlani to include the use of data structures in enterprise resource planning software (ERP) applications, as admitted by Applicant.

The ordinary skilled artisan would have been motivated to modify Furlani per the above for the purpose of managing company information of enterprises of various kinds in any field of technology by means of automatic data processing systems (para. 4 of the instant specification).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents or publications are cited with respect to sharing stored data objects via a dynamic lock structure: US 5,835,906 issued to Hagersten et al.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl M Shechtman who can be reached on (571) 272-4018. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cheryl M Shechtman/

Examiner, Art Unit 2163

May 14, 2008

/Uyen T. Le/

Primary Examiner, Art Unit 2163